The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 22

## UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PETER MERCHANT

Appeal No. 2004-2057 Application No. 09/546,962

HEARD: FEBRUARY 24, 2005

**MAILED** 

MAR 1 7 2005

PAT. & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Before JERRY SMITH, RUGGIERO, and MACDONALD, <u>Administrative</u> <u>Patent Judges</u>.

RUGGIERO, Administrative Patent Judge.

## DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-23, which are all of the claims pending in the present application.

The claimed invention relates to a target scanning method and system in which a light beam from a light source is reflected from a reflector having a variable shape arcuate reflective surface onto a beam expander. The beam expander in turn reflects light onto the target, the scanning of the target being effected

by controllably varying the shape of the reflector.

Representative claim 1 is reproduced as follows:

- A system for scanning a target, comprising:
- a light source providing a light beam;
- a reflector having an arcuate reflective surface with a variable shape;
- a shape controlling system for controlling said shape of said reflector; and
  - a beam expander;

said reflector reflecting a first portion of said light beam from said light source onto said beam expander, said beam expander reflecting at least a second portion of said first portion of said light beam onto said target, and said shape controlling system selectively varying said shape of said reflector, whereby said second portion scans across at least a portion of said target.

The Examiner relies on the following prior art:

Brobst et al. (Brobst) 6,053,409 Apr. 25, 2000 (filed Jun. 24, 1997)

Claims 1-23 stand finally rejected under 35 U.S.C. § 102(e) as being anticipated by Brobst.

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Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs<sup>1</sup> and Answer for the respective details.

## OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of anticipation relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the Brobst reference fully meets the invention as set forth in claims 1-23. Accordingly, we affirm.

Appellant indicates (Brief, page 3) that the claims on appeal stand or fall together as a group. Consistent with this indication, Appellant's arguments are directed solely to features which are set forth in independent claim 1. Accordingly, we will

<sup>&</sup>lt;sup>1</sup> The Appeal Brief was filed March 4, 2003 (Paper No. 10). In response to the Examiner's Answer dated June 12, 2003 (Paper No. 11), a Reply Brief was filed August 15, 2003 (Paper No. 15), which was acknowledged and entered by the Examiner as indicated in the communication dated April 5, 2004 (Paper No. 16).

select independent claim 1 as the representative claim for all the claims on appeal, and claims 2-23 will stand or fall with claim 1. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

At pages 3 and 4 of the Answer, the Examiner indicates how the various limitations in appealed claim 1 are read on the disclosure of Brobst. In particular, the Examiner points to the illustration in Figure 5A of Brobst along with the respective accompanying descriptions at column 5, lines 1-24, as well as the disclosure at column 3, line 52 through column 4, line 28 in reference to Figures 1 and 2 of Brobst.

In our view, the Examiner's analysis is sufficiently reasonable that we find that the Examiner has as least satisfied the burden of presenting a <u>prima facie</u> case of anticipation. The burden is, therefore, upon Appellant to come forward with evidence and/or arguments which persuasively rebut the Examiner's <u>prima facie</u> case. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived (<u>see</u> 37 CFR § 41.37(c)(1)(vii)).

Appellant's arguments in response assert that the Examiner has not shown how each of the claimed features are present in the disclosure of Brobst so as to establish a case of anticipation.

In particular, Appellant contends (Brief, pages 4 and 5; Reply Brief, pages 2-5) that, in contrast to the claimed invention, Brobst lacks a disclosure of a beam expander which functions to expand a light ray that is reflected from a variable shape reflector.

After careful review of the Brobst reference in light of the arguments of record, however, we are in general agreement with the Examiner's position as stated in the Answer. We make the observation that it is a basic tenet of patent law that claims are to be given their broadest reasonable interpretation consistent with the description in the specification. With this in mind, we have reviewed Appellant's specification for guidance as to the proper interpretation of the claim language setting forth the beam expansion feature and we find little enlightenment as to how to properly interpret such claim language. In fact, the extent of Appellant's description of the claimed beam expander appears in one paragraph on page 14 of the specification which discloses that it is the "arcuate reflective outer surface" of the expander structure (400, Figure 8) that provides for light

ray expansion. Given the paucity of description in Appellant's disclosure, we can only reach the general conclusion that the language of representative claim 1 simply does not require the interpretation asserted by Appellant in the Briefs.

With the above discussion in mind, we refer to the Examiner's discussion at page 5 of the Answer which directs attention to the polygonal scanning mirrors 16 in Figures 1 and 2 of Brobst, each of which include arcuate reflective outer surfaces. While the Examiner's statement of the grounds of rejection refers to the oscillating mirror 129 in the Figure 5A variable shape reflector embodiment of Brobst as corresponding to the claimed beam expander, we find no error, and Appellant has provided no arguments to the contrary, in the Examiner's assertion that the polygonal scanning mirrors in the alternative Figures 1-5 embodiments in Brobst could be substituted for the oscillating mirror structure 129 in the Figure 5A embodiment. note that Brobst (column 5, lines 1-4) suggests the interchangeability of the polygonal scan mirrors and the oscillating mirror structure. In our view, with the substitution of the polygonal scan mirrors with arcuate reflective outer surfaces for the oscillating mirror structure in place, all of the requirements of representative claim 1 would be satisfied by

the disclosure of Brobst since the arcuate reflective outer surfaces of the polygonal scan mirrors, the identical structure as disclosed by Appellant, would function to expand the reflected light rays onto the target.

In view of the above discussion, since the Examiner's prima facie case of anticipation has not been overcome by any convincing arguments from Appellant, the Examiner's 35 U.S.C. § 102(e) rejection of representative claim 1, as well as claims 2-23 which fall with claim 1, is sustained. Therefore, the decision of the Examiner rejecting claims 1-23 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(effective September 13, 2004; 69 Fed. Reg. 49960 (August 12, 2004); 1286 Off. Gaz. Pat. and TM Office 21 (September 7, 2004)).

## <u>AFFIRMED</u>

JERRY SMITH

Administrative Patent Judge

Joseph Lugiur

JOSEPH F. RUGGIERO

Administrative Patent Judge

ALLEN R. MACDONALD

Administrative Patent Judge

Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

JFR:hh

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